Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): An optical power control system configured for use with a wavelength division demultiplexer, said optical power control system comprising:

a plurality of photodetectors connected so as to monitor output power on a plurality of outputs of said demultiplexer, each of said outputs carrying a different WDM channel; and

a control system that receives power level indications from said plurality of photodetectors, controls a gain of an optical amplification system providing input to an optical filter, and controls a tilt of said optical filter providing input to said demultiplexer; and

wherein said control system sets a gain of said optical amplification system such that a power level indication based on said output powers monitored by said plurality of photodetectors is set within a desired range and sets a tilt of said optical filter such that a difference in said monitored output powers is reduced.

Claim 2 (original): The system of claim 1 wherein said power level indication comprises an average of said output powers monitored by said plurality of photodetectors.

Claim 3 (original): The system of claim 2 wherein said desired range corresponds to an optical receiver dynamic range.

Claim 4 (canceled)

Claim 5 (canceled)

Claim 6 (previously presented): The system of claim 1 wherein said control system sets a tilt of said optical filter to reduce a difference in monitored output powers for a highest WDM channel and a lowest WDM channel.

Claim 7 (previously presented): A WDM receiver system comprising:

an optical amplifier system having variable gain and receiving a WDM signal comprising multiple wavelengths;

an optical filter having dynamically controllable tilt, said optical filter receiving an amplified WDM signal input from said optical amplifier system and outputting a filtered WDM signal;

a demultiplexer receiving said filtered WDM signal from said optical filter and separating said filtered WDM signal into a plurality of single wavelength signals each corresponding to a different WDM channel;

a plurality of photodetectors monitoring power levels of said plurality of single wavelength signals; and

a control system that receives power level indications from said plurality of photodetectors, controls a gain of said optical amplifier system such that a power level indication based on said output powers monitored by said plurality of photodetectors is set within a desired range, and controls a tilt of said optical filter such that a difference in said output powers monitored by said plurality of photodetectors between selected WDM channels is reduced.

Claim 8 (original): The system of claim 7 wherein said power level indication comprises an average of said output powers monitored by said plurality of photodetectors.

Claim 9 (original): The system of claim 8 wherein said desired range corresponds to an optical receiver dynamic range.

Claim 10 (canceled)

Claim 11 (canceled)

Claim 12 (previously presented): The system of claim 7 wherein said gain control system sets a tilt of said optical filter to reduce a difference in monitored output powers for a highest WDM channel and a lowest WDM channel.

Claim 13 (previously presented): In a WDM receiver system, a method for controlling power on multiple WDM channels, said method comprising:

monitoring output powers on individual ones of said multiple WDM channels;

determining a power level indication based on said monitored output powers; and

setting amplification on a signal including said multiple WDM channels so that said power level indication falls within a desired range; and

filtering said signal including said multiple WDM signals to adjust gain tilt among said multiple WDM channels so that a difference in said monitored output powers between selected WDM channels is reduced.

Claim 14 (original): The method of claim 13 wherein said power level indication comprises an average of said monitored output powers.

Claim 15 (original): The method of claim 13 further comprising:

using a demultiplexer to separate said multiple WDM channels into individual wavelength signals.

Claim 16 (canceled)

Claim 17 (previously presented): The method of claim 13 wherein filtering comprises:

filtering said signal using filter response characteristics that reduce a difference in monitored output powers for a highest WDM channel and a lowest WDM channel.

Claim 18 (previously presented): In a WDM receiver system, apparatus for controlling power on multiple WDM channels, said apparatus comprising:

means for monitoring output powers on individual ones of said multiple WDM channels;

means for determining a power level indication based on said monitored output powers;

means for setting amplification on a signal including said multiple WDM signals so that said power level indication falls within a desired range; and

means for filtering said signal including said multiple WDM signals to adjust gain tilt among said multiple WDM channels so that a difference in said monitored output powers between selected WDM channels is reduced.

Claim 19 (original): The apparatus of claim 18 wherein said power level indication comprises an average of said monitored output powers.

Claim 20 (original): The apparatus of claim 18 further comprising:

means for separating said multiple WDM channels into individual wavelength signals.

Claim 21 (canceled)

Claim 22 (previously presented): The apparatus of claim 18 wherein said filtering means comprises:

means for filtering said signal using filter response characteristics that reduce a difference in monitored output powers for a highest WDM channel and a lowest WDM channel.